WHAT IS CLAIMED IS:

1. An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input configured to electrically couple to the charge supply battery and an output configured to electrically couple to terminals of the storage battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the storage battery is a carbon battery.

2. The apparatus of claim 1 wherein the DC-DC converter circuit comprises a transformer configured to step up the supply voltage.

3. The apparatus of claim 2 wherein the DC-DC converter further comprises a bridge rectifier circuit configured to provide rectification of the stepped up supply voltage provided by the transformer.

4. The apparatus of claim 1 wherein the DC-DC converter circuit includes a transistor.

5. The apparatus of claim 1 wherein the DC-DC converter circuit includes a charge storage device.

6. The apparatus of claim 5 wherein the charge storage device is a capacitor.

7. The apparatus of claim 1 wherein the charge supply battery is a single cell.

8. The apparatus of claim 1 wherein the charge supply battery includes a plurality of cells.

9. The apparatus of claim 8 wherein the plurality of cells is two cells.

10. The apparatus of claim 1 wherein the charge supply battery is a "D" cell alkaline battery.

11. The apparatus of claim 1 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries.

12. The apparatus of claim 11 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries.

13. The apparatus of claim 1 wherein the charge supply battery is a "AA" alkaline battery.

14. The apparatus of claim 1 wherein the charge supply battery includes a plurality of "AA" alkaline batteries.

15. The apparatus of claim 14 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries.

16. The apparatus of claim 1 wherein the charge supply battery is a "C" cell alkaline battery.

17. The apparatus of claim 1 wherein the charge supply battery includes a plurality of "C" cell alkaline batteries.

18. The apparatus of claim 1 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries.

19. The apparatus of claim 1 wherein the carbon battery comprises at least one carbon coated battery electrode.

20. The apparatus of claim 19 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

21. The apparatus of claim 1 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

22. The apparatus of claim 21 further comprising a chemically active paste disposed on the carbon foam current collector such that the chemically active paste penetrates into the network of pores.

23. A jump-start booster pack, comprising:

a booster battery configured to provide starting energy to a vehicle;

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input electrically coupled to the charge supply battery and an output electrically coupled to the booster battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the booster battery is a carbon battery.

24. The apparatus of claim 23 wherein the charge supply battery is a single cell.

25. The apparatus of claim 23 wherein the charge supply battery includes a plurality of cells.

26. The apparatus of claim 25 wherein the plurality of cells is two cells.

27. The apparatus of claim 23 wherein the charge supply battery is a "D" cell alkaline battery.

28. The apparatus of claim 23 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries.

29. The apparatus of claim 28 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries.

30. The apparatus of claim 23 wherein the charge supply battery is a "AA" alkaline battery.

31. The apparatus of claim 23 wherein the charge supply battery includes a plurality of "AA" alkaline batteries.

32. The apparatus of claim 31 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries.

33. The apparatus of claim 23 wherein the charge supply battery is a "C" cell alkaline battery.

34. The apparatus of claim 23 wherein the charge supply battery includes a plurality of "C" cell alkaline batteries.

35. The apparatus of claim 34 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries.

36. The apparatus of claim 23 further comprising battery charging circuitry configured to charge a vehicle battery.

37. The apparatus of claim 36 wherein the battery charging circuitry is further configured to charge the booster battery.

38. The apparatus of claim 36 where the battery charging circuitry is coupled to the vehicle battery through a four point Kelvin connection.

39. The apparatus of claim 23 further comprising battery testing circuitry configured to test a vehicle battery.

40. The apparatus of claim 39 wherein the battery testing circuitry is further configured to test the booster battery.

41. The apparatus of claim 39 wherein the battery testing circuitry is coupled to the vehicle battery through a four point Kelvin connection.

42. The apparatus of claim 23 wherein the carbon battery comprises at least one carbon coated battery electrode.

43. The apparatus of claim 42 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

44. The apparatus of claim 23 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

45. The apparatus of claim 44 further comprising a chemically active paste disposed on the carbon foam current collector such that the chemically active paste penetrates into the network of pores.

46. A method for counteracting self discharge in a storage battery, comprising:

providing a supply voltage from a charge supply battery; and

providing a charging voltage to the storage battery as a function of the supply voltage, with the charging voltage having a magnitude greater than a magnitude of the supply voltage, wherein the storage battery is a carbon battery.

47. The method of claim 46 wherein providing the charging voltage is carried out by a DC-DC converter circuit.

48. The method of claim 47 wherein the DC-DC converter circuit comprises a transformer configured to step up the supply voltage.

49. The method of claim 48 wherein the DC-DC converter further comprises a bridge rectifier circuit configured to provide rectification of the stepped up supply voltage provided by the transformer.

50. The method of claim 47 wherein the DC-DC converter circuit includes a transistor.

51. The method of claim 47 wherein the DC-DC converter circuit includes a charge storage device.

52. The method of claim 51 wherein the charge storage device is a capacitor.

53. The method of claim 46 wherein the charge supply battery is a single cell.

54. The method of claim 46 wherein the charge supply battery includes a plurality of cells.

55. The method of claim 54 wherein the plurality of cells is two cells.

56. The method of claim 46 wherein the charge supply battery is a "D" cell alkaline battery.

57. The method of claim 46 wherein the charge supply battery includes a plurality of "D" cell alkaline batteries.

58. The method of claim 57 wherein the plurality of "D" cell alkaline batteries is two "D" cell alkaline batteries.

59. The method of claim 46 wherein the charge supply battery is a "AA" alkaline battery.

60. The method of claim 46 wherein the charge supply battery includes a plurality of "AA" alkaline batteries.

61. The method of claim 60 wherein the plurality of "AA" alkaline batteries is two "AA" alkaline batteries.

62. The method of claim 46 wherein the charge supply battery is a "C" cell alkaline battery.

63. The method of claim 46 wherein the charge supply battery includes a plurality of "C" cell alkaline batteries.

64. The method of claim 63 wherein the plurality of "C" cell alkaline batteries is two "C" cell alkaline batteries.

65. The method of claim 46 wherein the carbon battery comprises at least one carbon coated battery electrode.

66. The method of claim 65 further comprising a chemically active paste disposed on the at least one carbon coated battery electrode.

67. The method of claim 46 wherein the carbon battery comprises at least one carbon foam current collector including a network of pores.

68. The method of claim 67 further comprising a chemically active paste disposed on the carbon foam

current collector such that the chemically active paste penetrates into the network of pores.

69. A method of making a jump-start booster pack, comprising:

providing a booster battery configured to provide starting energy to a vehicle;

providing a charge supply battery configured to provide a supply voltage; and

providing a DC-DC converter circuit having an input electrically coupled to the charge supply battery and an output electrically coupled to the booster battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, wherein the booster battery is a carbon battery.

70. The method of claim 69 wherein providing the charge supply comprises providing a single cell battery.

71. The method of claim 69 wherein providing the charge supply battery comprises providing a "D" cell alkaline battery.

72. The method of claim 69 further comprising providing battery charging circuitry configured to charge a vehicle battery.

73. The method of claim 72 wherein the battery charging circuitry is further configured to charge the booster battery.

74. The method of claim 72 further comprising coupling the battery charging circuitry to the vehicle battery through a four point Kelvin connection.

75. The method of claim 69 further comprising providing battery testing circuitry configured to test a vehicle battery.

76. The method of claim 75 wherein the battery testing circuitry is further configured to test the booster battery.

77. The method of claim 75 further comprising coupling the battery testing circuitry to the vehicle battery through a four point Kelvin connection.

78. An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input configured to electrically couple to the charge supply battery and an output configured to electrically couple to terminals of the storage battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the storage battery is a nickel-metal hydride battery.

79. An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input configured to electrically couple to the charge supply battery and an output configured to electrically couple to terminals of the storage battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the

storage battery is a nickel cadmium battery.

80. An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input configured to electrically couple to the charge supply battery and an output configured to electrically couple to terminals of the storage battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the storage battery is a lithium ion battery.

81. An apparatus for counteracting self discharge in a storage battery, comprising:

a charge supply battery configured to provide a supply voltage; and

a DC-DC converter circuit having an input configured to electrically couple to the charge supply battery and an output configured to electrically

couple to terminals of the storage battery;

wherein the DC-DC converter circuit is configured to provide a charging voltage at the output having a magnitude greater than a magnitude of the supply voltage, and wherein the storage battery is a lead-acid battery.